

Technology Services

MISSION STATEMENT

The mission of the Department of Technology Services is to enable the Montgomery County government to use Information Technology where it adds the most value; to enable our employees to be the best at serving their customers; to deliver information and services to citizens at work, at home, and in the community; and to increase the productivity of government.

BUDGET OVERVIEW

The total recommended FY06 Operating Budget for the Department of Technology Services is \$27,593,820, an increase of \$2,021,130 or 7.9 percent from the FY05 Approved Budget of \$25,572,690. Personnel Costs comprise 56.6 percent of the budget for 152 full-time positions and two part-time positions for 147.0 workyears. Operating Expenses and Capital Outlay account for the remaining 43.4 percent of the FY06 budget.

Not included in the above recommendation is a total of \$1,207,200 and 2.3 workyears that are charged to Cable Television. The funding and workyears for this item are included in the receiving department's budget.

In addition, this department's Capital Improvements Program (CIP) requires Current Revenue funding. Please see Section 6 for information related to the CIP.

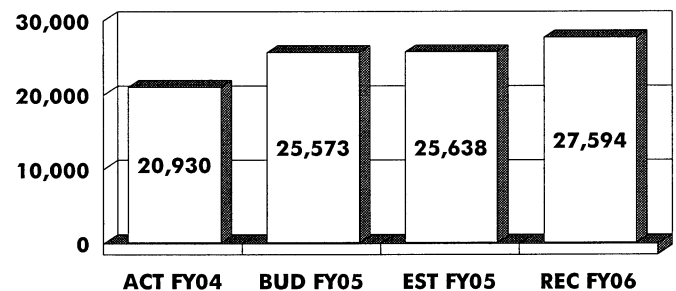
HIGHLIGHTS

- ❖ **Continued support for the County's enterprise IT system for software and hardware maintenance, and software licenses \$169,080.**
- ❖ **Provide one-time funding for a server replacement study.**
- ❖ **Enhance staffing in the Enterprise Infrastructure Division (EID) to help improve security Countywide.**
- ❖ **Expand the Interactive Voice Response (IVR) system platform.**
- ❖ **Implement a public WiFi demonstration project within a ten block area of downtown Silver Spring for six months.**
- ❖ **Continue the County's four-year personal computer replacement cycle to replace 2,000 personal computers in FY06.**
- ❖ **Continue support for development of the Integrated Justice Information System (IJIS), which will provide important information about criminal activities to appropriate County, State, and Federal public agencies \$989,640. \$707,000 will be allocated to the IJIS CIP project.**

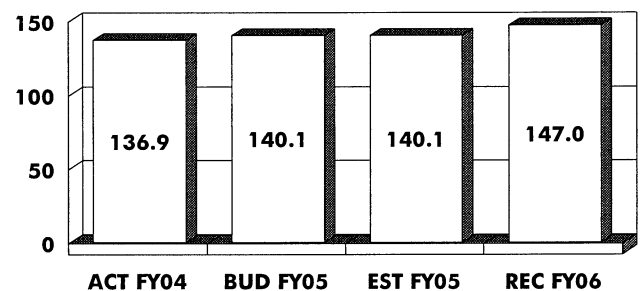
Program Summary

	Expenditures	WYs
Application Development and Integration	1,282,990	9.8
Project Management and Requirements	1,996,520	16.0
Enterprise System Services	1,774,100	12.0
Geographic Information Systems (GIS)	1,327,010	11.5
Enterprise Services	10,511,840	35.2
Host Operations	2,281,750	18.7
Enterprise Security/FiberNet WAN	1,356,580	9.0
Telecommunications Services	1,745,640	12.2
Radio Communications	3,138,780	9.2
Administration	2,178,610	13.4
Totals	27,593,820	147.0

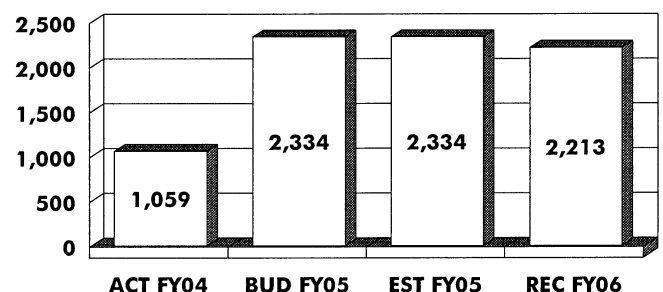
Trends



EXPENDITURES [\$000s]



WORKYEARS



RELATED REVENUES [\$000s]

❖ Productivity Enhancements

Online Financial Disclosure Enhancements

- Decrease employee time spent on accessing employee services with SSO (single sign on) and online access.

Enterprise Services

- Create blocking list on the County e-mail gateways, which has mitigated over 1.1 million spam e-mail messages.
- Implementation of the multi-level anti-virus system has enabled the County to intercept over 900,000 infected and/or potentially harmful e-mail messages and has provided the ability to scan 100 million e-mail messages in which viruses were removed from 18,000 messages.

Enterprise Applications

The following projects have been completed by the Applications Development Team:

- The ePayment application allows the Commission for Women (CFW) to provide online registration and payment services for professional training seminars and classes. Over 50 percent of the Commission for Women's registration and payments are made online.
- The Language Bank provides the Volunteer Center with a secure and cost effective method to use web-based applications to enable the County and registered non-profit agencies to identify and register volunteers for interpreting and translating foreign languages.

FiberNet/WAN

- Reduce costs to deploy site electronics from an average cost of \$50,000 to less than \$3,000 per site by deploying Ethernet technology in lieu of ATM technology

Telecommunications

- Reduce telephone directory costs from \$30,000 annually to \$10,000 by printing a limited number of directories and providing a complete directory on the County's website. The website version is more current since it is updated weekly as opposed to annually.

PROGRAM CONTACTS

Contact Helen Ni of the Department of Technology Services at 240.777.2807 or Jennifer R. Bryant of the Office of Management and Budget at 240.777.2761 for more information regarding this department's operating budget.

PROGRAM DESCRIPTIONS

Application Development and Integration

The Application Development and Integration Program is responsible for implementation of new web-based information technology systems in the County. The Program assesses business and technical requirements, translates requirements

into technology system solutions, and defines standard process and software development methodology to deliver IT systems and solutions. This program supports the County's electronic government initiative to include web site management. Electronic government seeks to provide cost-effective services at greater convenience to citizens through the use of modern communications technology like the Internet.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	1,167,080	7.8
FY06 CE Recommended	1,282,990	9.8

Project Management and Requirements

The Project Management and Requirements Program serves as the first step in the successful implementation of new information technology systems in the County. The program defines business requirements and translates those into information technology systems requirements and specifications, identifies opportunities to leverage technology and integrates new technology into existing operating systems. This program works across departments to promote digitization of critical business processes, improved level of systems integration and greater information accessibility and availability. The program also coordinates the implementation of the new Records Management System (RMS), Integrated Justice Information System (IJIS), and plan for a future Enterprise Resource Planning (ERP) System.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	1,383,370	14.5
FY06 CE Recommended	1,996,520	16.0

Enterprise System Services

The Enterprise System Services Program is responsible for supporting the enterprise software applications which are used throughout the County government (e.g., FAMIS/ADPICS). This program is responsible for applications maintenance, upgrade, phase out, and replacement. It integrates custom-coded programs, commercial software packages and contractual services to meet the functional requirements of customer departments. The program also maintains existing enterprise information systems by making program and parameter modifications to correct errors or accommodate changing legal, regulatory, and functional requirements. Additionally, applications are adapted to conform to changes in the County's hardware and software environment.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	1,492,200	11.0
FY06 CE Recommended	1,774,100	12.0

Geographic Information Systems (GIS)

The Geographic Information Systems program designs and implements GIS applications for County departments, maintains the accuracy and currency of the Montgomery County

Geographic Base File (GBF/DIME) and participates in the development and maintenance of the planimetric and property databases.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	1,254,190	11.5
FY06 CE Recommended	1,327,010	11.5

Enterprise Services

The Enterprise Services Division (ESD) provides services to departments and employees through effective management of the County computing infrastructure. The division manages enterprise-wide systems including: enterprise messaging system, enterprise directory system, enterprise file and print system, mainframe system, and enterprise servers (web, application, database). ESD manages and provides support for the Public Safety Data System. ESD also operates the Information Technology help desk, manages the County government's PC hardware and software inventory, and provides support directly to departments and employees through the Desktop Computer Modernization program.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	10,170,890	34.2
FY06 CE Recommended	10,511,840	35.2

Host Operations

The Host Operations program operates the County's central data processing facility, processes all job requests, and offers server monitoring and backup services. The program provides 24-hour-a-day service supporting the mainframe, network control center equipment, the Library Department materials circulation system, the Finance Department tax receivable system, timesheet data entry, and central file and print servers. The Data Control function provides the processing and production of all mainframe job requests, as well as the preparation and reconciliation of computer-printed output for all user departments. This program also performs all centralized data entry functions and verifies all keypunch work through a combination of direct and contractual services.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	2,220,700	18.7
FY06 CE Recommended	2,281,750	18.7

Enterprise Security/FiberNet WAN

The Enterprise Security program provides data security consulting, policies, and procedures to the County government. The program monitors and disseminates anti-virus and other security alerts and information, performs security assessment and mitigation, and designs security solutions for central and decentralized systems. This program is responsible for identifying and then monitoring and managing the tools required to protect the County from data security threats. Some costs associated with this program are charged to the Cable Fund in

accordance with the cable franchise provision to support installation, construction, operations, and maintenance of the County's FiberNet and associated network equipment.

FY06 Recommended Changes

- ☐ *Enhance staffing to help improve security Countywide.*
- ☐ *Implement a public WiFi demonstration project within a ten block area of downtown Silver Spring for six months.*

	Expenditures	WYs
FY05 Approved	1,064,020	7.6
FY06 CE Recommended	1,356,580	9.0

Telecommunications Services

The Telecommunications Services program includes planning, designing, engineering, acquiring, installing, repairing, relocating, and modifying telecommunications equipment. The County owns and operates its own digital telephone system for the larger government facilities and electronic key systems at smaller County sites. This program also includes management of the County's voice mail system.

FY06 Recommended Changes

- ☐ *Expand the Interactive Voice Response (IVR) system platform.*

	Expenditures	WYs
FY05 Approved	1,657,690	12.2
FY06 CE Recommended	1,745,640	12.2

Radio Communications

The Radio Communications program is responsible for planning, designing, engineering, acquiring, maintaining, installing, and repairing the County's complex radio and mobile communications systems which predominantly support public safety agencies.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	3,087,280	9.2
FY06 CE Recommended	3,138,780	9.2

Administration

The Administration program is responsible for strategic planning, allocation of resources, setting policy, and guiding all programs of the Department and County government Information Technology initiatives. Centralized administrative support functions are performed in the areas of contracting, budgeting, personnel, procurement, and facilities management.

FY06 Recommended Changes

	Expenditures	WYs
FY05 Approved	2,075,270	13.4
FY06 CE Recommended	2,178,610	13.4

BUDGET SUMMARY

	Actual FY04	Budget FY05	Estimated FY05	Recommended FY06	% Chg Bud/Rec
COUNTY GENERAL FUND					
EXPENDITURES					
Salaries and Wages	10,123,264	10,952,290	10,795,760	12,058,470	10.1%
Employee Benefits	2,565,811	3,058,390	2,945,700	3,557,440	16.3%
County General Fund Personnel Costs	12,689,075	14,010,680	13,741,460	15,615,910	11.5%
Operating Expenses	8,179,988	11,409,380	11,744,380	11,825,280	3.6%
Capital Outlay	60,995	152,630	152,550	152,630	—
County General Fund Expenditures	20,930,058	25,572,690	25,638,390	27,593,820	7.9%
PERSONNEL					
Full-Time	140	147	147	152	3.4%
Part-Time	2	2	2	2	—
Workyears	136.9	140.1	140.1	147.0	4.9%
REVENUES					
Sundry/Miscellaneous	630	0	0	0	—
Public Pay Phone Commissions - Other	40,133	42,000	42,000	42,000	—
Emergency 911 - DTS	1,000,000	2,170,960	2,170,960	2,170,960	—
Telecommunication	18,605	0	0	0	—
Intergovernmental Reimbursements:Other	0	120,790	120,790	0	—
County General Fund Revenues	1,059,368	2,333,750	2,333,750	2,212,960	-5.2%

FY06 RECOMMENDED CHANGES CROSSWALK

	Expenditures	WYs
COUNTY GENERAL FUND		
FY05 ORIGINAL APPROPRIATION	25,572,690	140.1
Changes (with service impacts)		
Enhance: Enterprise: Interactive Voice Response (IVR) platform expansion [Telecommunications Services]	230,050	0.0
Enhance: Enterprise: Public Wireless Fidelity (WiFi) installation [Enterprise Security/FiberNet WAN]	95,000	0.0
Enhance: Sr. Technology Specialist position - Security Team [Enterprise Security/FiberNet WAN]	86,060	0.8
Other Adjustments (with no service impacts)		
Increase Cost: FY06 Compensation	485,560	0.0
Increase Cost: Annualization of FY05 Personnel Costs	272,080	0.5
Shift: Transfer of system maintenance costs from Finance to DTS for E-Timesheet Project [Enterprise System Services]	232,090	0.0
Increase Cost: FY06 Group Insurance Rate Adjustments	185,110	0.0
Increase Cost: Enterprise Licenses and Maintenance [Enterprise Services]	169,080	0.0
Increase Cost: FY06 Retirement Rate Adjustments	140,140	0.0
Increase Cost: Integrated Justice Information System (IJIS) Backbone: Production system maintenance	130,000	0.0
Increase Cost: Conversion of term Sr. Information Technology Specialist position to permanent - IJIS Project [Project Management and Requirements]	113,060	1.0
Increase Cost: IJIS Maryland Information Law Enforcement System (MILES)/National Criminal Information Center (NCIC) Access Changes - \$7.00 per user to \$9.00 per user monthly	100,800	0.0
Increase Cost: Server replacement study [Enterprise Services]	100,000	0.0
Shift: Technology Specialist II position [Enterprise System Services]	66,580	1.0
Shift: Technology Specialist I position [Enterprise System Services]	58,420	1.0
Increase Cost: IJIS Project Office Lease	51,840	0.0
Increase Cost: Records Management	15,880	0.0
Increase Cost: Motor Pool	4,990	0.0
Increase Cost: Miscellaneous workyear adjustment to DTS/Cable TV FiberNet chargeback [Enterprise Security/FiberNet WAN]	0	-0.4
Shift: Sr. Technology Specialist position offset by a decrease in operating funds (97,290). [Enterprise Security/FiberNet WAN]	0	1.0
Shift: Technology Specialist I position offset by a decrease in operating funds (67,490). [Enterprise System Services]	0	1.0
Shift: Technology Specialist II position offset by a decrease in operating funds (76,840). [Application Development and Integration]	0	1.0
Shift: Technology Specialist III position offset by a decrease in operating funds (87,660). [Application Development and Integration]	0	1.0
Shift: Abolish Sr. Technology Specialist position [Enterprise System Services]	-125,060	-1.0

	Expenditures	WYs
Decrease Cost: Elimination of one-time items approved in FY05 [Telecommunications Services]	-390,550	0.0
FY06 RECOMMENDATION:	27,593,820	147.0

FUTURE FISCAL IMPACTS

Title	CE REC. FY06	FY07	FY08	(\$000's) FY09	FY10	FY11
This table is intended to present significant future fiscal impacts of the department's programs.						
COUNTY GENERAL FUND						
Expenditures						
FY06 Recommended	27,594	27,594	27,594	27,594	27,594	27,594
No inflation or compensation change is included in outyear projections.						
Annualization of Positions Recommended in FY06	0	20	20	20	20	20
New positions in the FY06 budget are generally assumed to be filled at least two months after the fiscal year begins. Therefore, the above amounts reflect annualization of these positions in the outyears.						
Elimination of One-Time Items Recommended in FY06	0	-344	-344	-344	-344	-344
Items recommended for one-time funding in FY06, including Interactive Voice Response (IVR) Infrastructure expansion (\$230,050), Server Replacement Study (\$100,000), Records Management (\$7,940), and purchase of furniture and a desktop computer for the Sr. IT Specialist position - Security Team (\$6,000), will be eliminated from the base in the outyears.						
Labor Contracts	0	632	745	745	745	745
These figures represent the annualization of FY06 increments, general wage adjustments, and associated benefits. Estimated compensation (e.g., general wage adjustment and service increments) for personnel are included for FY07 and beyond.						
Subtotal Expenditures	27,594	27,902	28,015	28,015	28,015	28,015

TECHNOLOGY SERVICES

PROGRAM:

Desktop Computer Modernization (DCM)

PROGRAM ELEMENT:
PROGRAM MISSION:

To provide up-to-date desktop PCs and software and improved levels of service (acquisition, management, Help Desk, and maintenance) to all departments at lower cost

COMMUNITY OUTCOMES SUPPORTED:

- Enable County employees to be the best at serving their customers
- Deliver information and services to citizens at work, at home, and in the community
- Increase the productivity of government

PROGRAM MEASURES

	FY02 ACTUAL	FY03 ACTUAL	FY04 ACTUAL	FY05 BUDGET	FY06 CE REC
Outcomes/Results:					
Average cost saving per PC purchased via DCM (\$)	321	316	280	300	300
Average age of PCs (years)	2.1	2.3	3.0	2.5	2.4
Service Quality:					
Average Help Desk wait time (seconds)	7.5	6.3	2.3	^b 90	^b 90
Percentage of Help Desk calls resolved during initial call	96	96	95	80	80
Average time to repair a PC (hours)	4.3	3.8	2.1	^c 8.0	^c 8.0
Efficiency:					
Cost per PC covered under services (\$) ^d	410	410	410	431	368
Cost per service call (including installations) (\$)	205	147	134	148	135
Workload/Outputs:					
PCs replaced	257	1,804	115	2,250	2,000
PCs covered under services	6,383	6,853	6,947	7,800	7,900
Service calls performed (including installations) ^a	13,389	20,329	22,868	22,000	24,000
Inputs:					
Expenditures - purchases (\$000)	1,110	2,345	531	2,860	2,962
Expenditures - services (\$000)	2,751	2,988	3,066	3,259	3,234
Expenditures - management (\$000)	520	717	634	674	661
TOTAL expenditures (\$000) ^e	4,381	6,050	4,231	6,793	6,857
Workyears ^e	7.0	7.0	7.0	7.0	7.0

Notes:

- ^aThe number of service calls performed has continued to increase over the years as more and more departments utilize the PC Help Desk.
- ^b90 seconds is the contractual level of service; the actual results have been well below the contractual requirement.
- ^cEight hours is the contract level of service; the actual results have been well below the contractual requirement.
- ^dThe cost per PC covered under services is a fixed contracted amount per PC, with some variability depending on the type and quality of service.
- ^eFrom FY02 through FY04, DCM program expenditures and staff have consisted of two contractors and five in-house positions from the Enterprise Services Program. In FY05, one contractor will be converted to a County merit position. Thus, the expenditures and workyears for FY05 include one contractor and six in-house positions from the Enterprise Services Program.

EXPLANATION:

The Desktop Computer Modernization (DCM) program was developed by Montgomery County's Department of Technology Services based on a best practices approach to maintaining a modern, cost-effective desktop computing environment in the County. The program, which began in FY99, is designed to lower the total cost of ownership through standardization, asset management, Help Desk support, and maintenance services. The DCM program includes centralized management and maintenance of the County's installed base of nearly 7,000 desktop and laptop computers (as of FY04) and annual replacement for one-fourth of those PCs. The program is designed to improve the efficiency and effectiveness of County employees by ensuring that they have the appropriate, state-of-the-art computing resources they need to do their job. County DCM staff are responsible for planning, coordination, and quality assurance, and for coordinating and monitoring PC installation, moves, adds, changes, the Help Desk, and maintenance services provided by a contractor.

PROGRAM PARTNERS IN SUPPORT OF OUTCOMES: Office of Human Resources (training), user departments (planning, implementation).

MAJOR RELATED PLANS AND GUIDELINES: Horizon 21 Information Technology Strategic Plan: 1998, 1999; Telecommunications Audit Action Plan, 1998; DCM Program Best Practices and Financial Analysis, 1997.

TECHNOLOGY SERVICES

PROGRAM:

Geographic Information Systems

PROGRAM ELEMENT:

Custom Maps and Data Reports Generation

PROGRAM MISSION:

To provide timely and accurate maps and data reports that enable informed decision-making on geographically-based issues by customer departments

COMMUNITY OUTCOMES SUPPORTED:

- Enable County employees to be the best at serving their customers
- Deliver information and services to citizens at work, at home, and in the community
- Increase the productivity of government

PROGRAM MEASURES

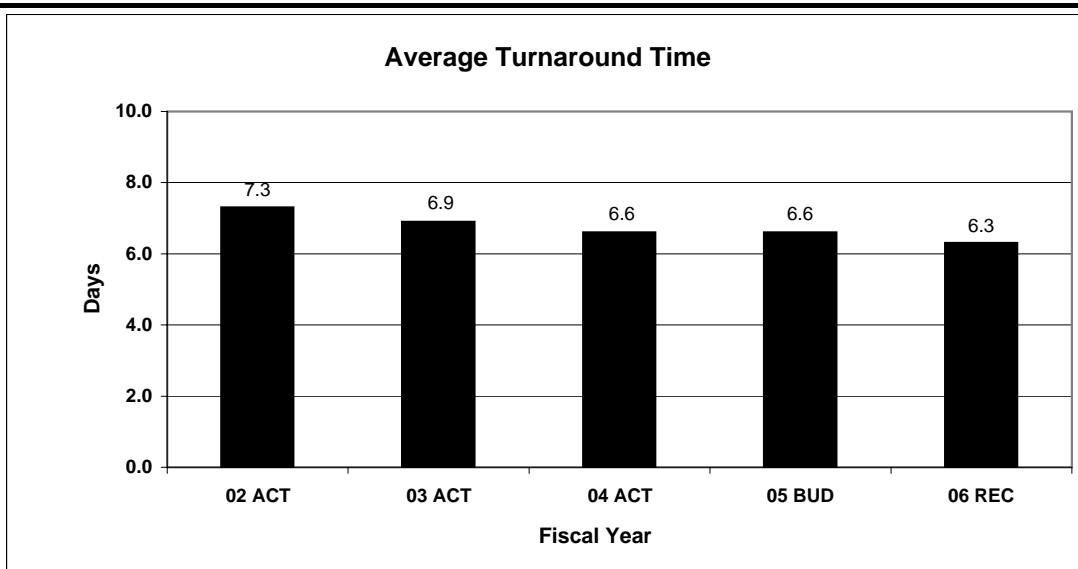
	FY02 ACTUAL	FY03 ACTUAL	FY04 ACTUAL	FY05 BUDGET	FY06 CE REC
Outcomes/Results:					
Cost avoidance for land surveys - Department of Public Works and Transportation (\$000)	235	250	248	250	250
Cost savings on election maps - Board of Elections (\$000)	35	35	34	35	35
Cost savings on State's Attorney maps (\$000)	15	15	14	15	15
Service Quality:					
Average turnaround time for production of customized maps (days)	7.3	6.9	6.6	6.6	6.3
Efficiency:					
Average cost per map (\$)	90	85	106	106	104
Workload/Outputs:					
Number of custom maps provided	1,450	1,604	1,405	1,500	1,680
Number of database layers updated	8	8	9	9	10
Inputs:					
Workyears ^a	2.4	2.3	2.3	2.3	2.3
Expenditures - personnel (\$000)	131	137	149	159	174

Notes:

^aWorkyears relate to staff time spent on the generation of custom maps.

EXPLANATION:

The County government has made increasing use of customized Geographic Information System (GIS) maps. While the average cost per map climbed nearly 18% between FY02 and FY04, the turnaround time decreased by almost 10%.



PROGRAM PARTNERS IN SUPPORT OF OUTCOMES: Maryland-National Capital Park and Planning Commission, Washington Suburban Sanitary Commission, Montgomery County Public Schools, Department of Public Works and Transportation, Department of Permitting Services, user departments and agencies, cities of Gaithersburg and Rockville, Metropolitan Washington Council of Governments.

MAJOR RELATED PLANS AND GUIDELINES: Horizon 21 Information Technology Strategic Plan, July 1998, 1999; Montgomery County GIS Plan, June 1996.